12. SEATTLE-BAINBRIDGE

The Seattle – Bainbridge route connects the downtown Seattle area with Bainbridge Island, much of north and central Kitsap County, and to the Olympic Peninsula via the Hood Canal Bridge. This route is the most traveled of any in the WSF system. For the 1999 year, the annual total ridership for the Seattle-Bainbridge route was 4.9 million passengers plus 2.4 million vehicles and drivers for a total of 7.3 million people, or about 20,000 riders per day. During the month of May 1999 when this route was surveyed, average daily ridership was 20,080. The approximate crossing time for the 7.5 nautical mile route is 35 minutes.

Key trip making information and geographic travel patterns for patrons of this route are presented herein. Additional route-specific survey tabulations and results for all three survey periods, including ferry user demographic information, can be found in Appendix B.

12.1 TRIP MAKING INFORMATION

12.1.1 Weekday Trip Statistics

Weekday trip statistics presented here are grouped into three topics:

- Trip purpose and usage frequency;
- Travel modes and round-trip patterns; and
- Desired transit improvements.

The focus of these results is primarily on the PM peak survey period, contrasting the peak results to the PM non-peak period for key items such as trip purpose and wait times.

Trip Purpose

The trip purpose and frequency for the weekday PM peak period and non-peak period for the Seattle-Bainbridge route are summarized in Table 12-1 and Table 12-2, respectively. It becomes evident that the majority of riders are utilizing the ferry route for work/school or business related purposes in both periods, accounting for 72% of total ridership in the PM peak period and 54% during the PM non-peak period.). In general, trip purpose findings in 1999 correspond to those found in 1993.

Similar trends regarding the trip-making frequency of riders and trip purposes could be observed for both the peak and non-peak periods. Specifically, for frequent riders of the Seattle-Bainbridge route (10 or more rides in the past 7 days) the majority of trips were work/school or business related. Trips with purposes of appointment/personal/other, as well as social/recreational/shopping/sight-seeing trips, were made most by somewhat infrequent ferry riders (2 to 5 rides in the past 7 days.

Table 12-1
Trip Purpose and Frequency of Use Distribution
Seattle-Bainbridge — Weekday PM Peak Period

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Expanded Ridership Total
1st Ride in Past 7 Days*	2.3%	13.2%	20.3%	6.5%	471
2 to 5 Rides in Past 7 Days	13.5%	45.7%	51.2%	23.5%	1,693
6 to 9 Rides in Past 7 Days	20.9%	15.2%	14.0%	19.1%	1,374
10 or More Rides in Past 7 Days	54.0%	5.7%	2.7%	39.9%	2,873
No Answer	9.4%	20.3%	11.8%	11.0%	794
Totals	100.0%	100.0%	100.0%	100.0%	7,206
Overall Trip Purpose Distribution	71.8%	11.6%	16.6%	100.0%	
Expanded Ridership	5,174	836	1,197	7,206	

^{* 1}st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Table 12-2
Trip Purpose and Frequency of Use Distribution
Seattle-Bainbridge — Weekday PM Non-Peak Period

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Expanded Ridership Total
1st Ride in Past 7 Days*	6.5%	25.6%	26.6%	15.6%	435
2 to 5 Rides in Past 7 Days	20.9%	49.7%	45.2%	32.9%	920
6 to 9 Rides in Past 7 Days	18.8%	6.3%	11.4%	14.4%	403
10 or More Rides in Past 7 Days	44.0%	8.3%	8.3%	27.5%	769
No Answer	9.9%	10.1%	8.5%	9.6%	267
Totals	100.0%	100.0%	100.0%	100.0%	2,794
Overall Trip Purpose Distribution	53.8%	18.4%	27.9%	100.0%	
Expanded Ridership	1,503	513	779	2,794	

^{* 1}st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Table 12-3 below describes trip origin and destination types by direction in the weekday PM peak period for the Seattle-Bainbridge route. Overall, most trips were made in the westbound direction (almost 4,000 more trips than eastbound), consistent with PM peak period travel patterns throughout much the WSF system. The highest share of trips were made from work/school to

"... This route is becoming more uni-directional during peak commute times.

Nearly 78% of PM peak period trips are westbound, up from 67% in 1993."

home, accounting for 61% of travel in both directions, and more than 74% of trips in the westbound direction. In the eastbound direction, the largest share of trips were made from home to some other place, at 30% of all eastbound travel. Overall, the trends for trip origin and destination types observed for the May 1999 survey data are similar to those from the 1993 survey. However, like the other central sound routes, this route is becoming more uni-directional during peak commute times. Nearly 78% of PM peak period trips are westbound, up from 67% in 1993.

Table 12-3
Trip Origin and Destination Types by Direction
Seattle-Bainbridge — Weekday PM Peak Period

Origin & Destina	ntion Types	Destination	Shares Across	All Origins:	Expanded
Origin	Destination	Eastbound	Westbound	Both	Ridership
Place	Place	Trips	Trips	Directions	Total
Home	Home	1.7%	0.6%	0.9%	62
	Work/School	7.6%	0.5%	2.1%	150
	Other	29.5%	1.8%	8.0%	579
Work/School	Home	15.5%	74.5%	61.3%	4,418
	Work/School	4.0%	0.2%	1.0%	75
	Other	7.7%	2.3%	3.5%	252
Other	Home	15.4%	17.0%	16.6%	1,199
	Work/School	2.1%	0.3%	0.7%	52
	Other	16.4%	2.7%	5.8%	418
Totals Travel Directio Expanded Ride		100.0% 22.4% 1,615	100.0% 77.6% 5,591	100.0% 100.0% 7,206	7,206

Travel Modes and Round-Trip Patterns

The responses for the round-trip patterns and methods for the PM peak period are summarized in Table 12-4. During the weekday PM peak period, approximately 81% of the respondents were on the second half of a round-trip. Over 90% reported they were using the same ferry route to complete their round-trip, with 84% completing their trip on the same day it was initiated. For those who were on the first portion of their trip when the survey was distributed, respondents were asked to predict their travel pattern and method to complete their round-trip. Nearly 90% stated their expected return trip would be on the same ferry route and just under 70% said they would complete their trip in the same day.

Table 12-4
Round-Trip Patterns and Methods
Seattle-Bainbridge — Weekday PM Peak Period

Round-Trip Segment & Method / Time	Today	Some Other Day	No Answer	Expanded Ridership
Declared Initial Trip				80.9%
(Reported on 2nd Half of Round-Trip)				
Same Ferry Route	77.7%	2.5%	11.3%	5338
Not Using Ferry System	1.1%	0.3%	0.3%	101
Different Ferry Route	2.8%	0.4%	0.3%	206
No Answer	1.9%	0.2%	1.1%	187
Total Declared Initial Trip	83.6%	3.4%	13.0%	5832
Expected Return Trip				17.7%
(Reported on 1st Half of Round-Trip)				
Same Ferry Route	61.7%	14.3%	11.3%	1112
Not Using Ferry System	1.2%	1.2%	0.5%	36
Different Ferry Route	1.9%	1.1%	0.5%	45
No Answer	3.8%	1.5%	1.0%	81
Total Expected Return Trip	68.6%	18.2%	13.3%	1274
No Answer				1.4%
(Did Not Report Round-Trip Status)				
No Answer			100.0%	100
Expanded Ridership Total	5,750	429	1,027	7,206

Access and egress mode shares and boarding mode distributions from the 1993 survey were modified to approximate 1999 Travel Survey methods and data collection procedures for comparison purposes. However, the 1993 results are not directly comparable to the expanded survey results based upon the data collected in 1999. Please see Section 3.5.2 in Chapter 3 for a detailed explanation of these procedures. These modified percentages can nonetheless be used for generalized comparisons, as presented in the following discussion.

The access and egress mode to the ferry terminal along with the boarding method for the Seattle-Bainbridge route is described in Table 12-5 for the PM peak period. Unlike most other auto-ferry routes, walk-on passengers represent the largest share of riders on the Seattle – Bainbridge route during the PM peak hour. The trend for boarding methods between the May 1999 and May 1993 data is similar in the sense that more walk-on boardings were observed in comparison to those boarding in a vehicle.

"In comparison to the 1993 survey, walkboard terminal access and egress by bus or shuttle in 1999 has essentially doubled." In comparison to reported access and egress information from the 1993 survey, walk-board terminal access and egress by bus or shuttle in 1999 has essentially doubled. This is likely due to significant increases in transit service provided by Kitsap Transit since the 1993 survey. Specifically, approximately 9% of walk-on passengers accessed the ferry terminal by bus in 1993 bus, which had increased to 19% of walk-on passengers by 1999. In 1993 approximately 16% of walk-on riders used a bus or shuttle

to depart from the ferry terminal and in 1999 over a third of walk-on riders utilized a bus or shuttle. It appears that walk-on passengers who were previously walking or biking to and from the terminals have shifted to bus or shuttle use, as the share of walk-on passengers arriving and departing in a vehicle has remained relatively steady since 1993.

Table 12-5
Access Mode to Ferry — Boarding Method — Egress Mode from Ferry
Seattle-Bainbridge — Weekday PM Peak Period

Access Mode to Ferry Terminal	Percent Distrib.	Boarding Method	Percent Distrib.	Mode Shares	Egress Mode from Ferry Terminal	Percent Distrib.
Pedestrian/Bicycle	53.4%	Walked-On		55.8%	Pedestrian/Bicycle	21.5%
By Vehicle*	28.1%	Pedestrian	95.4%		By Vehicle*	42.2%
By Bus or Shuttle	18.5%	Pedestrian w/ Bicycle	4.6%		By Bus or Shuttle	36.3%
Total	100.0%	Total	100.0%		Total	100.0%
In-Vehicle	100.0%	In-Vehicle		44.2%	In-Vehicle	100.0%
		Vehicle Drivers*	70.3%			
		Vehicle Passengers	29.7%			
		Total	100.0%			
		Total		100.0%		
		Expanded Ridership Total		7,206		

^{*} includes motorcycles

Table 12-6 and Table 12-7 below summarize the wait time distribution by boarding method for the weekday PM peak and PM non-peak periods, respectively. Similar arrival wait trends were noted for both weekday periods. Specifically, 70% of pedestrian and bicycle passengers waited zero to ten minutes during the PM peak period to board the ferry and over 55% waited zero to 10 minutes during the PM non-peak period. Thirty-nine percent of all in-vehicle riders reported waiting 11 to 30 minutes during the PM peak period and 44% waited the same length of time during the PM non-peak period. However the share of invehicle riders waiting zero to 10 minutes doubles in the PM non-peak period, accounting for 28% of all in-vehicle riders. Conversely, a larger percentage of walk-on passengers waited 11 to 30 minutes to board a ferry during the PM non-peak period, which may be due in part to infrequent riders who are not as familiar with ferry schedules and required additional time for ticketing and boarding of the vessel.

Table 12-6
Wait Time Distribution by Boarding Method
Seattle-Bainbridge — Weekday PM Peak Period

Wait Time Category / Boarding Method	Walk Board (Pedestrian & Bicycle)	Vehicle Board (Driver & Passenger)	Expanded Ridership Total
Zero to 10 Minutes	69.8%	13.9%	3,252
11 to 30 Minutes	16.4%	38.9%	1,899
31 to 60 Minutes	3.8%	33.4%	1,214
61 to 90 Minutes	0.1%	5.0%	161
More Than 90 Minutes	0.2%	1.1%	42
No Answer	9.7%	7.8%	638
Totals	100.0%	100.0%	
Expanded Ridership	4,024	3,182	7,206

Table 12-7
Wait Time Distribution by Boarding Method
Seattle-Bainbridge — Weekday PM Non-Peak Period

Wait Time Category / Boarding Method	Walk Board (Pedestrian & Bicycle)	Vehicle Board (Driver & Passenger)	Expanded Ridership Total
Zero to 10 Minutes	56.7%	27.8%	1076
11 to 30 Minutes	30.9%	44.4%	1102
31 to 60 Minutes	4.8%	19.4%	392
61 to 90 Minutes	0.0%	3.1%	54
More Than 90 Minutes	0.0%	0.0%	0
No Answer	7.6%	5.2%	171
Totals	100.0%	100.0%	
Expanded Ridership	1,031	1,764	2,794

Parking statistics for walk-on ferry passengers can be found in Table 12-8 for the PM peak period. More than half of all walk-on passengers responded that they parked a car on at least one end of the ferry route, and 35% indicated that parking on at least one side of the route required payment. Of particular interest is the fact that over 14% of walk-on passengers indicated that they parked a car on *both* sides of the ferry route. Among those that paid for parking, the average daily expenditure ranged from \$4.47 for paid parking on one side to \$9.26 for those who used paid parking on both sides of the ferry route.

Table 12-8
Walk-Board Passenger Parking Statistics
Seattle-Bainbridge — Weekday PM Peak Period

Reported Parking Characteristics	Expanded Ridership	Percent of Total	Average Total Parking Paid*
Used Paid Parking on Both Sides	300	7.4%	\$9.26
Used Paid Parking One Side & Free Parking Other Side	125	3.1%	\$4.75
Used Free Parking on Both Sides	162	4.0%	\$0.00
Paid Parking One Side & Did Not Park Other Side or Insufficient Information	1,006	25.0%	\$4.47
Free Parking One Side & Did Not Park Other Side or Insufficient Information	529	13.2%	\$0.00
Did Not Park on Either Side or Insufficient Parking Information	1,901	47.2%	NA
Totals	4,024	100.0%	

^{*}Only surveys with a reported dollar amount paid for parking were included in the average cost calculation (those with free parking were excluded).

Desired Transit Improvements

Table 12-9 and Table 12-10 describe the desired transit improvements that were expressed by the respondents of the survey for the PM peak period and non-peak period, respectively. The most commonly reported transit improvement desired was service within two blocks of their origin or destination location. The second most frequent comment was to provide transit service at both ends of the ferry route, followed closely by the request for more parkand-ride lots or spaces.

Table 12-9
Transit Improvements Desired
Seattle-Bainbridge — Weekday PM Peak Period

Transit Improvement	Distribution	Expanded Ridership
Service within 2 Blocks of Origin or Destination	26.7%	1,926
Service at Both Ends of Ferry Route	12.6%	906
Seamless Connection between Ferry & Bus	9.4%	675
Employer Paid or Subsidized Bus Pass	9.8%	705
More Park & Ride Lots/Spaces Available	10.5%	756
None of the Above/No Answer	23.8%	1,713
Frequent Write-In Comments		
More Passenger Only Service	2.2%	159
Lower Park & Ride Parking Fees/Free	3.0%	214
More Park & Ride Information	0.9%	65
"Other" Comments	1.2%	87
Totals	100.0%	7,206

Table 12-10
Transit Improvements Desired
Seattle-Bainbridge — Weekday PM Non-Peak Period

Transit Improvement	Distribution	Expanded Ridership
Service within 2 Blocks of Origin or Destination	22.9%	640
Service at Both Ends of Ferry Route	15.4%	430
Seamless Connection between Ferry & Bus	8.8%	246
Employer Paid or Subsidized Bus Pass	6.2%	173
More Park & Ride Lots/Spaces Available	11.0%	307
None of the Above/No Answer	26.4%	739
Frequent Write-In Comments		
More Passenger Only Service	2.0%	55
Lower Park & Ride Parking Fees/Free	3.3%	92
More Park & Ride Information	2.7%	76
"Other" Comments	1.3%	36
Totals	100.0%	2,794

12.1.2 Sunday Trip Statistics

Sunday trip statistics presented here are grouped into two categories:

- Trip purpose and usage frequency; and
- Travel modes and round-trip patterns.

Trip Purpose

For the Sunday survey period, trip purpose and frequency information can be observed in Table 12-11. From the table it becomes evident that trips on Sunday are primarily for social/recreational/shopping/ or sightseeing purposes. During the weekday, the majority of trips were related to work/school or business, as would be expected, whereas nearly 75% of Sunday survey period trips were for recreational purposes. Essentially, the shares of commute oriented trip and recreation based trips are reversed between the PM peak period and the Sunday survey period. In addition, Sunday survey period respondents are clearly less frequent users of the ferry system than PM peak or PM non-peak riders. Almost 75% of all Sunday survey period respondents reported 5 or fewer rides in the past 7 days, with 25% recording their first ride in the past week.

Table 12-11
Trip Purpose and Frequency of Use Distribution
Seattle-Bainbridge — Sunday Survey Period

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Usable Responses
1st Ride in Past 7 Days*	11.2%	17.6%	28.6%	24.9%	286
2 to 5 Rides in Past 7 Days	32.0%	53.5%	49.2%	48.0%	551
6 to 9 Rides in Past 7 Days	18.4%	10.7%	4.2%	6.8%	78
10 or More Rides in Past 7 Days	26.4%	7.0%	5.0%	7.7%	88
No Answer	12.0%	11.2%	12.9%	12.6%	144
Totals	100.0%	100.0%	100.0%	100.0%	1,147
Overall Trip Purpose Distribution	10.9%	16.3%	72.8%	100.0%	
Usable Responses	125	187	835	1,147	

^{* 1}st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Travel Modes and Round-Trip Patterns

The responses for the round-trip patterns and methods for the Sunday survey period are summarized in Table 12-12. During the Sunday survey period, approximately 61% of the respondents were on the second half of a round-trip, about 20% less than during the PM peak period. A major difference between the weekday survey period ridership and the Sunday survey period was the percentage of riders who began their trip on a different day. Specifically, during the weekday PM peak period only 3.4% of the declared initial trips occurred on some other day. In the Sunday survey period, 26.2% of the total declared initial trips occurred on some other day. Interestingly, a greater share of those Sunday survey period respondents on the 1st half of a round-trip, reported they would complete their round-trip on the same day than their counterparts in the PM peak period.

Table 12-13 summarizes the waiting time distribution by boarding method for the Sunday survey period. Most pedestrian and bicycle passengers waited eleven to thirty minutes to board the ferry, as did in-vehicle-riders. During the weekday period, most pedestrians and bicyclists waited from zero to ten minutes, while most in-vehicle riders waited 11 to 60 minutes. Meaning Sunday pedestrian and bicycle passengers waited longer to board the ferry than those during the weekday, while in-vehicle boarders waited slightly less time with a greater percentage reporting 11 to 30 minute wait-times. This difference is likely due to the relative un-familiarity of Sunday users, in comparison to weekday riders, with not only the ferry schedule, but the time required for ticketing and boarding of the vessel as well.

Table 12-12 Round-Trip Patterns and Methods Seattle-Bainbridge — Sunday Survey Period

Round-Trip Segment & Method / Time	Today	Some Other Day	No Answer	Usable Responses
Declared Initial Trip				61.3%
(Reported on 2nd Half of Round-Trip)				
Same Ferry Route	57.3%	18.9%	8.7%	175
Not Using Ferry System	0.0%	0.5%	0.0%	1
Different Ferry Route	5.8%	5.8%	0.5%	25
No Answer	1.5%	1.0%	0.0%	5
Total Declared Initial Trip	64.6%	26.2%	9.2%	206
Expected Return Trip				36.9%
(Reported on 1st Half of Round-Trip)				
Same Ferry Route	64.5%	7.3%	9.7%	101
Not Using Ferry System	0.8%	0.0%	0.0%	1
Different Ferry Route	10.5%	0.0%	0.0%	13
No Answer	3.2%	3.2%	0.8%	9
Total Expected Return Trip	79.0%	10.5%	10.5%	124
No Answer				1.8%
(Did Not Report Round-Trip Status)				
No Answer			100.0%	6
Usable Responses	231	67	38	336

Table 12-13
Wait Time Distribution by Boarding Method
Seattle-Bainbridge — Sunday Survey Period

Wait Time Distribution / Boarding Method	Walk Board (Pedestrian & Bicycle)	Vehicle Board (Driver & Passenger)	Usable Responses
Zero to 10 Minutes	27.9%	7.3%	132
11 to 30 Minutes	46.4%	50.3%	568
31 to 60 Minutes	17.2%	26.5%	282
61 to 90 Minutes	0.9%	2.6%	26
More Than 90 Minutes	0.9%	1.2%	13
No Answer	6.9%	12.0%	126
Totals	100.0%	100.0%	
Usable Responses	233	914	1,147

12.2 GEOGRAPHIC TRAVEL PATTERNS

This section provides tables and map figures which present the locations for ferry user trip origins and destinations. Of key interest for updating the WSF travel demand forecasting model are the PM peak period origin-destination (O-D) trip tables by travel direction, presented as expanded PM peak ridership volumes and distributions for all modes, as well as for walk-on and in-vehicle boardings. Similar O-D trip tables presenting unexpanded Sunday survey period distributions are also provided. Complementing the PM peak and Sunday trip tables are two sets of map figures. The first set shows the geographic flows of origins and destinations, including route district percentage distributions, for all trips by direction. The second set of maps illustrates the directional densities of trip origins and destinations, using different pinpoint symbols to delineate walk-on and in-vehicle boarding methods.

12.2.1 Weekday PM Peak Period Trip Patterns

For the Seattle-Bainbridge route, Table 12-14 summarizes the weekday PM peak period in the westbound direction for all boarding modes and Figure 12-1 provides a geographic distribution of the westbound trip origins and destinations for all boarding modes. Over 50% of all weekday PM peak period riders reported origin locations in the Seattle CBD, most other locations account for 5% or less. Nearly 60% of all weekday PM peak period riders are going to locations on Bainbridge Island, divided as 27% to the south end and 33% to the north end. Destinations in the Other North Kitsap County district account for 17% of all PM peak period travel.

In the eastbound direction about 25% of all riders are coming from north Bainbridge Island and 29% from south Bainbridge Island, accounting for over 50% of all eastbound ridership. Other north Kitsap County represents a 16% share of eastbound riders. As shown in Table 12-15 and illustrated in Figure 12-2, the Seattle CBD is the most common destination, accounting for 25% of all eastbound rider destinations. Interestingly eastbound riders have more varied destination locations when compared to westbound riders' origin locations, even though the district percentage of eastbound origins are about the same as for westbound destination locations.

The origins and destinations for PM peak period westbound walk-on and in-vehicle boardings are shown in Table 12-16 and Table 12-17, respectively, and illustrated in Figure 12-3. Walk-on passengers have very clear origin and destination clusters in the Seattle CBD (74% of all origin locations), Bainbridge Island (62% of destination locations), and the greater Poulsbo/N. Kitsap area. In-vehicle origin and destination locations are somewhat more dispersed than walk-on passengers, as is the case for other routes. In-vehicle passengers have a greater variety of origin locations to the east and south of Seattle and more destination locations near to the north and west of Bainbridge Island, as well as locations near Port Townsend and the Olympic Peninsula.

In the eastbound direction, the PM peak walk-on and in-vehicle passenger trip origins and destinations can be observed in Table 12-18 and Table 12-19. The walk-on boardings follow a similar trend that was observed for all modes in the eastbound direction, with many trips

originating from South Bainbridge Island and going to the Seattle CBD. However, for the in-vehicle boardings in the eastbound direction, more trips originate from North Bainbridge Island as well as the Port Townsend area. The most commonly reported destinations were Bellevue/Mercer Island, the University District/Sand Point district and the Seattle CBD with relatively equal representation. Figure 12-4 graphically represents the eastbound PM peak period trip origins and destinations by boarding mode.

Table 12-14
Seattle-Bainbridge O-D Trip Table
Weekday PM Peak Period — Westbound — All Boarding Modes

	,																		
ORIGIN	DESTINATION	52 South Bainbridge Island	North Bainbridge Island	oorispo 1122	Kingston	PS Other North Kitsap County	5717 Greater Silverdale	S North Central Kitsap County	Mason County	South Kitsap/West Pierce Co.	Port Townsend	© Other Northeast Jefferson Co.	Southeast Jefferson County	Port Angeles	ES Sequim/Other East Clallam Co.	The West Olympic Pensinsula	St. Greater Bremerton	Origin Totals	Origin Shares
	_												1131						
Seattle CBD	1101	777	1,026	211	83	530	62	129	11	35	16	75	8	3	24	16	37	3,043	54.5%
Seattle Industrial Area	1102	59	61	32		58		13		3		14			6			246	4.4%
South Seattle/Boeing Field	1103	22	25	13	3	41	8	6			3	13			6			140	2.5%
West Seattle	1104	11	20	3		6	3											42	0.8%
Capitol Hill	1105	67	75	11		48	14	19			3	5				13	3	258	4.6%
Queen Anne-Lake Union	1106	90	96	29	5	50	14	6	3	3	8	22					6	330	5.9%
Magnolia	1107	5	11	6		6			3	3								33	0.6%
University District/Sand Point	1108	98	41	11	3	11	6	8							3		3	182	3.3%
Ballard-Green Lake	1109	39	49	6	3	32	6	9							10	6		159	2.8%
North Seattle/Northgate	1110	17	28	3		3												50	0.9%
Shoreline-Lake Forest Park	1111		8				3											11	0.2%
Bothell-Kirkland/Redmond	1112	33	56	3		22		16		3	8	3					8	150	2.7%
Northwest Bellevue/CBD	1113	19	43	3	3	9		3				3						81	1.5%
Other Bellevue/Mercer Island	1114	57	57	13	3	31	3	6				3	3		13	6		194	3.5%
SeaTac	1115	51	72			37		6			10	8			24		3	211	3.8%
Other Soutwest King County	1116	11	9			3												23	0.4%
Renton/Kent	1117	49	76	11	3	31	10				3	9		6	9	8		213	3.8%
Issaquah	1118		36			6						3			3			47	0.8%
Other West King County	1119	3	8	3											3			17	0.3%
All Other Places	1137	85	27		3	26					6			3				150	2.7%
Destination Totals		1,493	1,823	357	108	948	128	219	16	46	56	158	11	11	100	48	59	5,583	100.0%
Destination Shares		26.7%	32.7%	6.4%	1.9%	17.0%	2.3%	3.9%	0.3%	0.8%	1.0%	2.8%	0.2%	0.2%	1.8%	0.9%	1.1%	100.0%	

Figure 12-1
Seattle - Bainbridge Westbound PM Peak Trips
All Boarding Modes

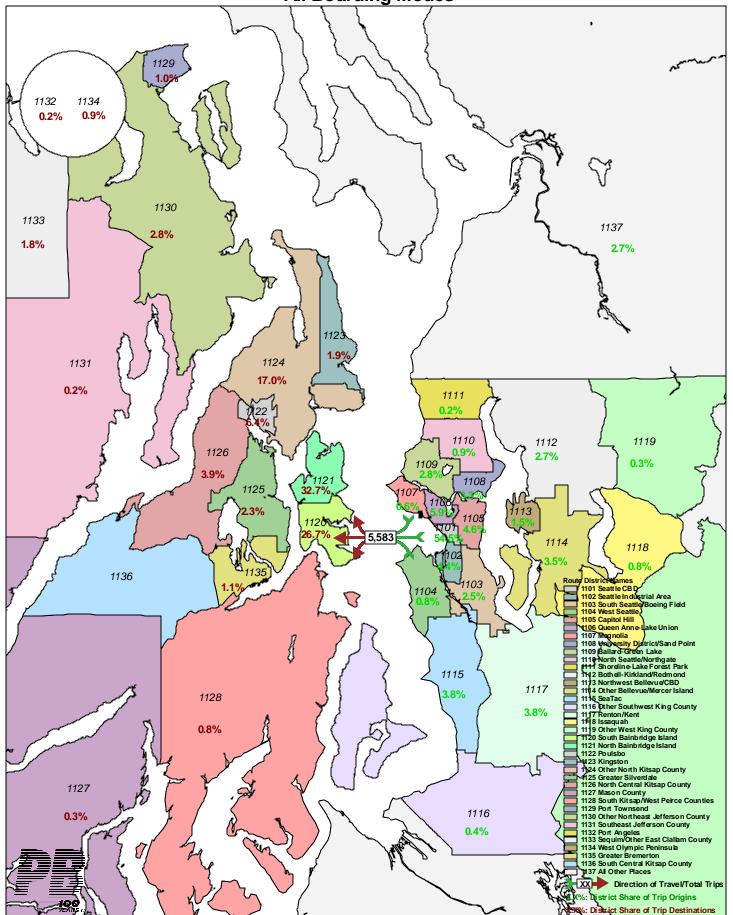


Table 12-15 Seattle-Bainbridge O-D Trip Table Weekday PM Peak Period — Eastbound — All Boarding Modes

ORIGIN	DESTINATION	101 Seattle CBD	Soattle Industrial Area	South Seattle/Boeing Field	104 West Seattle	Capitol Hill	90 Queen Anne-Lake Union	Magnolia	B University District/Sand Point	60 Ballard-Green Lake	01 North Seattle/Northgate	The Shoreline-Lake Forest Park	TITE Bothell-Kirkland/Redmond	다. Northwest Bellevue/CBD	1114 Other Bellevue Mercer Island	Sea Tac	9 Other Soutwest King County	2111 L Renton/Kent	Issadnah	6 Other West King County	127 All Other Places	Origin Totals	Origin Shares
South Bainbridge Island	1120	146	12	13	13	21	55	19	45	42		3	11	6	21	22	3	9	3	3	13	458	28.8%
North Bainbridge Island	1121	99	12	13	19	18	18	6	45	19	12	Ü	3	9	38	31	Ü	19	6	·	25	392	24.6%
Poulsbo	1122	20			3	4		6	25	6					3	4		6	3		6	86	5.4%
Kingston	1123	3				3	3		7				4		3							24	1.5%
Other North Kitsap County	1124	30	6	3	16	33	19	3	41	16			6	4	31	17		13		4	16	257	16.1%
Greater Silverdale	1125	10			4	3			13	3		3	3		12						3	53	3.3%
North Central Kitsap County	1126	33	3				9	3					3		7						3	61	3.8%
South Kitsap/West Pierce Co.	1128							3														3	0.2%
Port Townsend	1129	7						3		6					3	6					7	31	1.9%
Other Northeast Jefferson Co.	1130	17					3		3						7	22					3	54	3.4%
Southeast Jefferson County	1131						3								3					6		12	0.7%
Port Angeles	1132				10								7	3		8		3	3			33	2.1%
Sequim/Other East Clallam Co.	1133	28		6	7		9			3					10	3		3	3		9	79	5.0%
West Olympic Pensinsula	1134			3					3												10	16	1.0%
Greater Bremerton	1135		4				3						3	3							3	16	1.0%
South Central Kitsap County	1136								3													3	0.2%
All Other Places	1137	6	3												7							16	1.0%
Destination Totals		399	40	38	71	82	123	43	184	94	12	6	39	24	143	113	3	52	17	13	96	1,592	100.0%
Destination Shares		25.1%	2.5%	2.4%	4.4%	5.2%	7.7%	2.7%	11.5%	5.9%	0.7%	0.4%	2.5%	1.5%	9.0%	7.1%	0.2%	3.3%	1.1%	0.8%	6.0%	100.0%	/

Figure 12-2
Seattle - Bainbridge Eastbound PM Peak Trips
All Boarding Modes

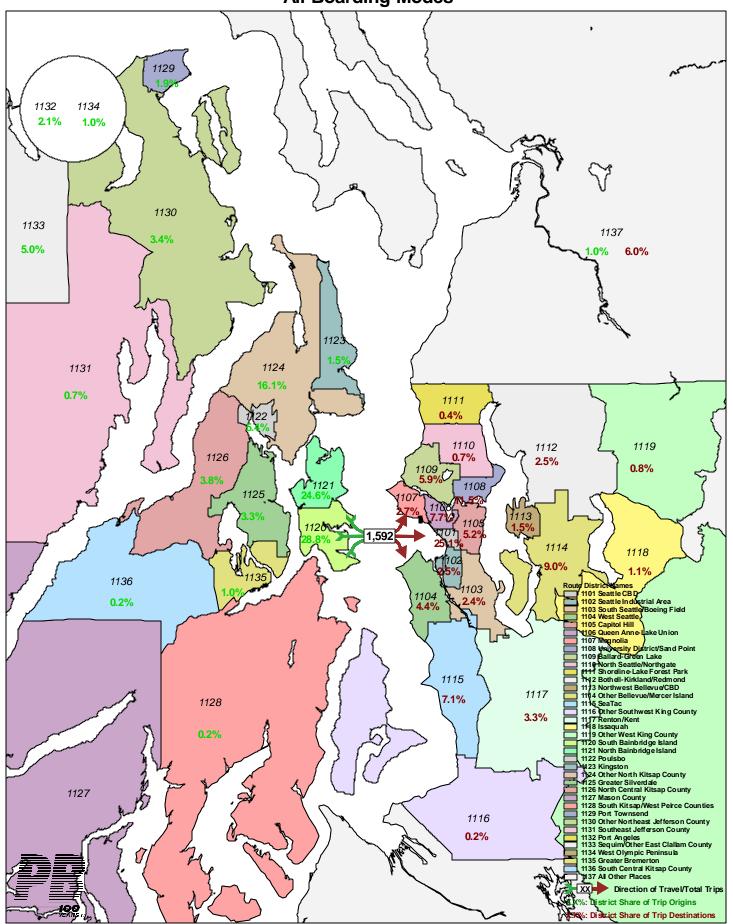


Table 12-16 Seattle-Bainbridge O-D Trip Table Weekday PM Peak Period — Westbound — Walk-On Boardings

ORIGIN	DESTINATION	DS South Bainbridge Island	T21 North Bainbridge Island	Poulsbo	Kingston 1153	751 Other North Kitsap County	Greater Silverdale	95 North Central Kitsap County	Mason County	South Kitsap/West Pierce Co.	1129 Port Townsend	© Other Northeast Jefferson Co.	25 Southeast Jefferson County	Sequim/Other East Clallam Co.	1134 West Olympic Pensinsula	St. Greater Bremerton	Origin Totals	Origin Shares
Seattle CBD	1101	668	888	168	78	463	51	118	11	35	3	37	8	5	3	37	2,572	73.7%
Seattle Industrial Area	1102	51	35	13		37		13		3		3					155	4.4%
South Seattle/Boeing Field	1103	11	16	5		11	3										45	1.3%
West Seattle	1104	3	3	3													8	0.2%
Capitol Hill	1105	45	43	11		13	8	3				5				3	131	3.8%
Queen Anne-Lake Union	1106	67	48	16	5	29	11	3	3	3	8	3					195	5.6%
Magnolia	1107	5	8	3		3											19	0.5%
University District/Sand Point	1108	59	19	5		8	3	8								3	104	3.0%
Ballard-Green Lake	1109	21	16	3	3	3	3										48	1.4%
North Seattle/Northgate	1110	5	8			3											16	0.5%
Shoreline-Lake Forest Park	1111		3														3	0.1%
Bothell-Kirkland/Redmond	1112	8	13			3		3		3						5	35	1.0%
Northwest Bellevue/CBD	1113	5	11	3													19	0.5%
Other Bellevue/Mercer Island	1114	13	16	3	3	3	3										40	1.1%
SeaTac	1115	13	8									3				3	27	0.8%
Other Soutwest King County	1116	3															3	0.1%
Renton/Kent	1117	5	27	5		8	3										48	1.4%
Issaquah	1118					3											3	0.1%
Other West King County	1119		3														3	0.1%
All Other Places	1137	16	3														19	0.5%
Destination Totals		1,000	1,166	238	88	586	83	147	13	43	11	51	8	5	3	51	3,492	100.0%
Destination Shares		28.6%	33.4%	6.8%	2.5%	16.8%	2.4%	4.2%	0.4%	1.2%	0.3%	1.5%	0.2%	0.2%	0.1%	1.5%	100.0%	

Table 12-17 Seattle–Bainbridge O-D Trip Table Weekday PM Peak Period — Westbound — In-Vehicle Boardings

	DESTINATION	South Bainbridge Island	North Bainbridge Island	Poulsbo	Kingston	Other North Kitsap County	Greater Silverdale	North Central Kitsap County	Mason County	South Kitsap/West Pierce Co.	Port Townsend	Other Northeast Jefferson Co.	Southeast Jefferson County	Port Angeles	Sequim/Other East Clallam Co.	West Olympic Pensinsula	Greater Bremerton	Origin Totals	Origin Shares
ORIGIN	\rightarrow	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135		
Seattle CBD	1101	108	138	43	6	67	11	11			13	38		3	19	13		471	22.5%
Seattle Industrial Area	1102	9	26	19		20						11			6			91	4.3%
South Seattle/Boeing Field	1103	11	9	8	3	30	6	6			3	13			6			94	4.5%
West Seattle	1104	9	17			6	3											34	1.6%
Capitol Hill	1105	22	32			35	6	16			3					13		127	6.1%
Queen Anne-Lake Union	1106	23	48	13		20	3	3				19					6	135	6.5%
Magnolia	1107		3	3		3			3	3								14	0.7%
University District/Sand Point	1108	39	22	6	3	3	3								3			78	3.7%
Ballard-Green Lake	1109	17	33	3		29	3	9							10	6		110	5.3%
North Seattle/Northgate	1110	11	20	3														34	1.6%
Shoreline-Lake Forest Park	1111		6				3											9	0.4%
Bothell-Kirkland/Redmond	1112	25	43	3		19		13			8	3					3	116	5.5%
Northwest Bellevue/CBD	1113	13	32		3	9		3				3						63	3.0%
Other Bellevue/Mercer Island	1114	44	41	10		29		6				3	3		13	6		154	7.4%
SeaTac	1115	38	64			37		6			10	6			24			184	8.8%
Other Soutwest King County	1116	9	9			3												20	1.0%
Renton/Kent	1117	44	49	6	3	23	8				3	9		6	9	8		165	7.9%
Issaquah	1118		36			3						3			3			44	2.1%
Other West King County	1119	3	6	3											3			14	0.7%
All Other Places	1137	69	25		3	26					6			3				132	6.3%
Destination Totals		493	657	119	20	362	45	72	3	3	45	108	3	11	95	45	9	2,091	100.0%
Destination Shares		23.6%	31.4%	5.7%	1.0%	17.3%	2.1%	3.5%	0.1%	0.1%	2.2%	5.1%	0.1%	0.5%	4.5%	2.2%	0.4%	100.0%	

Figure 12-3
Seattle - Bainbridge Westbound PM Peak Period
Trip Origins & Destinations by Boarding Mode

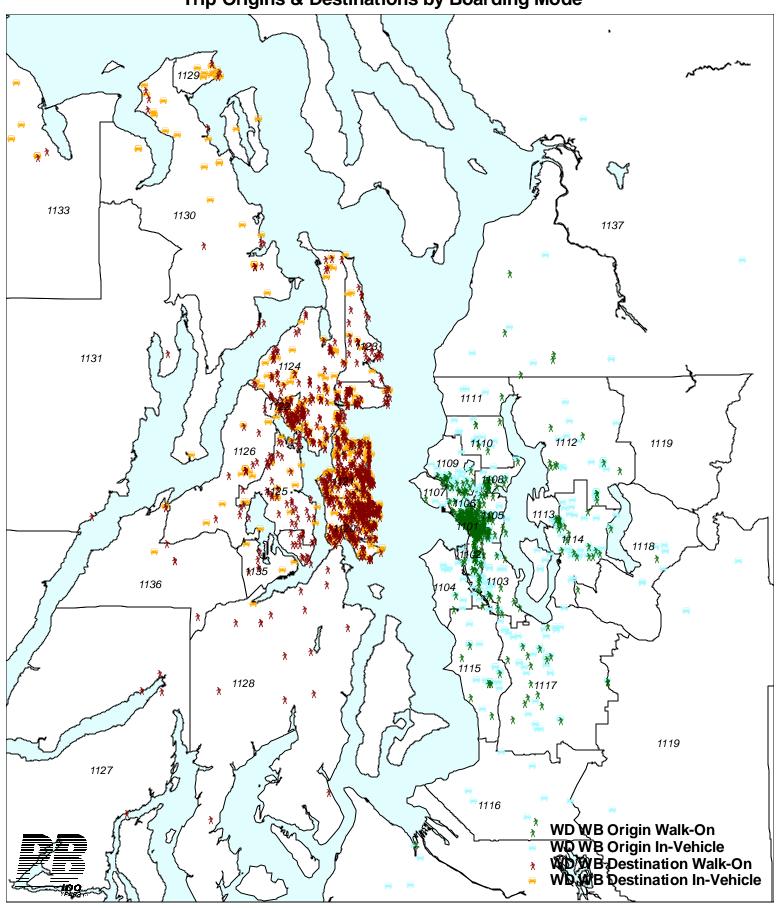


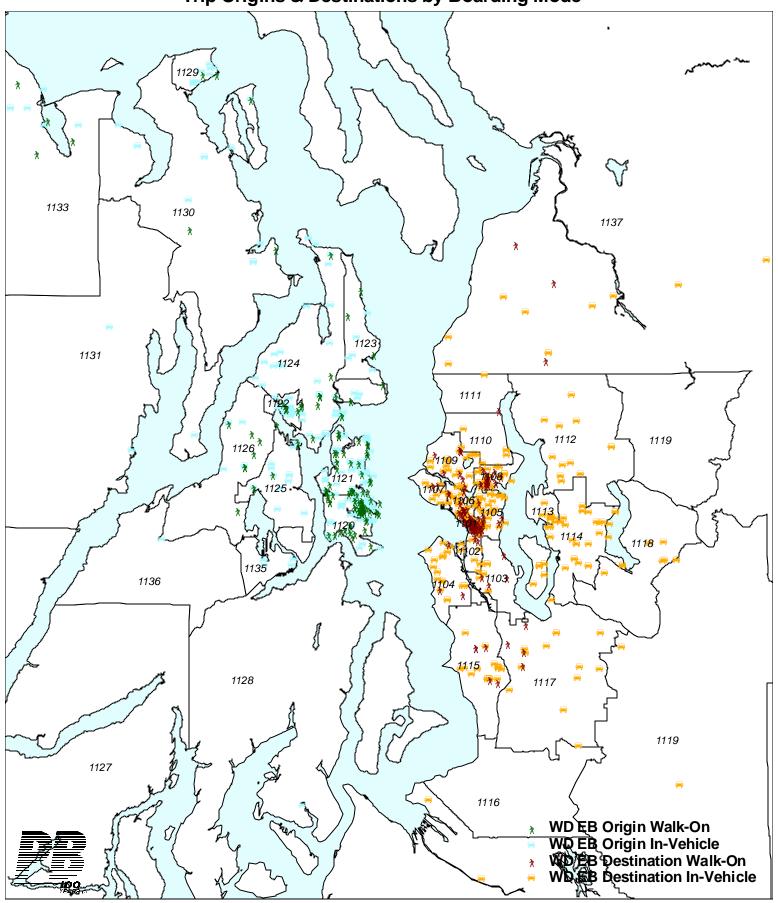
Table 12-18
Seattle-Bainbridge O-D Trip Table
Weekday PM Peak Period — Eastbound — Walk-On Boardings

		'														
ORIGIN	DESTINATION	Seattle CBD	50 Seattle Industrial Area	110 South Seattle/Boeing Field	West Seattle	Capitol Hill	90 Queen Anne-Lake Union	ejoubay Magnolia	University District/Sand Point	66 Ballard-Green Lake	11 Thoreline-Lake Forest Park	SeaTac 11115	1111 Renton/Kent	LST1 All Other Places	Origin Totals	Origin Shares
South Bainbridge Island	1120	99		10	7	3	34	10	20	20		7			211	41.3%
North Bainbridge Island	1121	61	3	3	3	7			27	3		7	7	10	133	26.0%
Poulsbo	1122	20						3	3						27	5.3%
Kingston	1123					3	3		3						10	2.0%
Other North Kitsap County	1124	20	3				3		17	3			7		54	10.7%
Greater Silverdale	1125	7									3				10	2.0%
North Central Kitsap County	1126	27					3								31	6.0%
Port Townsend	1129	7													7	1.3%
Other Northeast Jefferson Co.	1130	7										3			10	2.0%
Sequim/Other East Clallam Co.	1133	14													14	2.7%
All Other Places	1137		3												3	0.7%
Destination Totals		262	10	14	10	14	44	14	71	27	3	17	14	10	510	100.0%
Destination Shares		51.3%	2.0%	2.7%	2.0%	2.7%	8.7%	2.7%	14.0%	5.3%	0.7%	3.3%	2.7%	2.0%	100.0%	

Table 12-19
Seattle-Bainbridge O-D Trip Table
Weekday PM Peak Period — Eastbound — In-Vehicle Boardings

ORIGIN	DESTINATION	10 Seattle CBD	CO Seattle Industrial Area	South Seattle/Boeing Field	Po West Seattle	Capitol Hill	90 Queen Anne-Lake Union	eijouße 1107	© University District/Sand Point	66 Ballard-Green Lake	D North Seattle/Northgate	11 Shoreline-Lake Forest Park	5111 Bothell-Kirkland/Redmond	다. Northwest Bellevue/CBD	Other Bellevue/Mercer Island	SeaTac 1112	9 Other Soutwest King County	LT117	yenbessi 1118	G Other West King County	1137 All Other Places	Origin Totals	Origin Shares
South Bainbridge Island	1120	48	1102				21		24		1110	3				16	3			3		247	22.8%
North Bainbridge Island	1121			3	6	17		9		21	12	3	11	6	21		3	9	3	3	13	259	23.9%
Poulsbo	1122	38	9	10	16	12	18	6	17	16	12		3	9	38	24		13	6		14		5.4%
Kingston	1123				3	4		3	22	6					3	4		6	3		ь	59	1.3%
Other North Kitsap County	1124	3 10	3	3	16	33	16	3	4 24	13			4		3 31	17		6		4	16	14 202	18.7%
Greater Silverdale	1125		3	3			16	3					-	4		17		ь		4	3		3.9%
North Central Kitsap County	1126	3 6	3		4	3	6	3	13	3			3		12 7						3	43 30	2.8%
South Kitsap/West Pierce Co.	1128	ь	3				ь						3		/						3	30	0.3%
Port Townsend	1129							3													_	,	2.2%
Other Northeast Jefferson Co.								3		6					3	6					7	24	
Southeast Jefferson County	1130 1131	10					3		3						7	18					3	44	4.0% 1.1%
· ·							3						_		3					6		12	
Port Angeles Seguim/Other East Clallam Co.	1132				10								7	3		8		3	3			33	3.1%
	1133	14		6	7		9			3					10	3		3	3		9	66	6.1%
West Olympic Pensinsula	1134			3					3												10	16	
Greater Bremerton	1135		4				3						3	3							3	16	
South Central Kitsap County	1136								3													3	0.3%
All Other Places	1137	6													7							13	1.2%
Destination Totals		137	30	24	60	69	78	29	112	67	12	3	39	24	143	96	3	39	17	13	85	1,081	100.0%
Destination Shares		12.7%	2.8%	2.2%	5.6%	6.4%	7.3%	2.7%	10.4%	6.2%	1.1%	0.3%	3.6%	2.2%	13.3%	8.9%	0.3%	3.6%	1.6%	1.2%	7.9%	100.0%	

Figure 12-4
Seattle - Bainbridge Eastbound PM Peak Period
Trip Origins & Destinations by Boarding Mode



12.2.2 Sunday Survey Period Trip Patterns

Table 12-20 presents westbound trip origins and destinations during the Sunday survey period for all boarding modes, and Figure 12-5 provides a geographic illustration of the same. The Sunday travel patterns for all boarding modes in the westbound direction were not unlike those of the weekday period. For example, the origin location producing the largest share of trips was the Seattle CBD, however at a much reduced percentage of the total. The most common destinations were the North Bainbridge Island district, the South Bainbridge Island district and the Other North Kitsap County district, listed in order of decreasing share. Resulting in a more evenly dispersed distribution of westbound origin locations across King County and the rest of the mainland WSF service area.

In the eastbound direction, Table 12-21 and Figure 12-6 summarize and illustrate the origin and destination information for the Sunday survey period. The greatest share of passengers are originating from the North and South Bainbridge Island districts and the Other North Kitsap County district, similar to previous findings. However, what is more interesting is the trip origin share coming from the Olympic Peninsula district of Sequim/Other East Clallam County, which accounts for 12.5% of all eastbound origins and is clearly a departure from weekday PM peak period travel patterns. This result could be due to recreational travelers from the Seattle area returning home on Sunday.

Figure 12-7 and Figure 12-8 illustrates trip origins and destinations for the Sunday survey period by boarding modes for the westbound and eastbound directions, respectively. Walkon passengers for both eastbound and westbound travel display a pronounced locational cluster in downtown Seattle, with relatively dispersed locations on Bainbridge Island as well as north and central Kitsap County. Interestingly, in-vehicle riders display more clustering on Bainbridge Island for both origin and destination locations and show considerable density from the Seattle CBD to the Greenlake district.

Table 12-20 Seattle-Bainbridge O-D Trip Table Sunday Survey Period — Westbound — All Boarding Modes

				,															
	DESTINATION	South Bainbridge Island	North Bainbridge Island	Poulsbo	Kingston	Other North Kitsap County	Greater Silverdale	North Central Kitsap County	Mason County	Port Townsend	Other Northeast Jefferson Co.	Southeast Jefferson County	Port Angeles	Sequim/Other East Clallam Co.	West Olympic Pensinsula	Greater Bremerton	South Central Kitsap County	All Other Places	Origin Shares
ORIGIN	\searrow	1120	1121	1122	1123	1124	1125	1126	1127	1129	1130	1131	1132	1133	1134	1135	1136	1137	
Seattle CBD	1101	4.2%	5.0%		0.2%	3.0%	0.8%		0.2%		1.4%	0.2%	0.2%	0.6%		0.2%			15.9%
Seattle Industrial Area	1102					0.2%	0.4%												0.6%
South Seattle/Boeing Field	1103	0.6%	1.6%			0.2%				0.2%	0.4%			0.4%					3.4%
West Seattle	1104	0.2%	2.4%			0.2%					0.6%								3.4%
Capitol Hill	1105	2.4%	2.6%			0.6%		0.4%			0.4%			0.4%			0.2%		7.0%
Queen Anne-Lake Union	1106	2.2%	1.8%		0.4%	0.8%	0.4%			0.2%	0.4%			0.2%					6.4%
Magnolia	1107	1.0%	1.4%			0.6%	0.2%				0.2%								3.4%
University District/Sand Point	1108	0.8%	3.6%	0.2%		0.4%					0.4%			0.2%		0.2%			5.8%
Ballard-Green Lake	1109	2.2%	3.8%	0.2%		1.4%			0.2%	0.2%	0.4%					0.2%			8.5%
North Seattle/Northgate	1110	0.4%	2.0%									0.2%				0.2%			2.8%
Shoreline-Lake Forest Park	1111	0.2%	0.6%																0.8%
Bothell-Kirkland/Redmond	1112	0.8%	2.8%	0.4%		0.6%							0.2%						4.8%
Northwest Bellevue/CBD	1113	0.2%	0.8%					0.2%											1.2%
Other Bellevue/Mercer Island	1114	2.0%	2.0%			0.8%	0.4%	0.4%		0.2%	0.6%				0.2%				6.6%
SeaTac	1115	1.4%	3.6%	0.4%		0.6%				0.4%	0.2%		0.2%		0.2%				7.0%
Other Soutwest King County	1116	0.2%	0.8%			0.2%				0.2%									1.4%
Renton/Kent	1117	0.8%	0.8%		0.2%					0.2%	0.8%			0.2%	0.6%				3.6%
Issaquah	1118	0.4%	0.8%			0.4%		0.2%											1.8%
Other West King County	1119	0.2%	0.6%	0.2%		0.6%					0.6%			0.6%					2.8%
All Other Places	1137	2.6%	4.0%	0.8%		2.2%	0.2%	0.8%				0.2%		1.6%	0.2%		0.4%	0.2%	13.1%
Destination Shares		22.7%	40.8%	2.2%	0.8%	12.7%	2.4%	2.0%	0.4%	1.6%	6.4%	0.6%	0.6%	4.2%	1.2%	0.8%	0.6%	0.2%	100.0%

Figure 12-5
Seattle - Bainbridge Westbound Sunday Survey Period Trips
All Boarding Modes

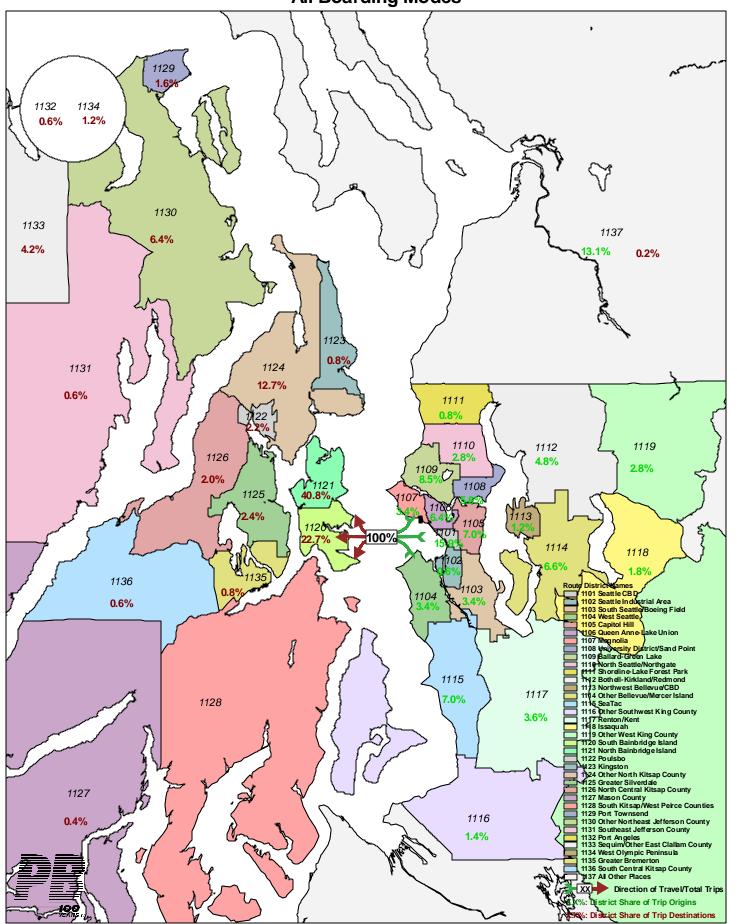


Table 12-21 Seattle-Bainbridge O-D Trip Table Sunday Survey Period — Eastbound — All Boarding Modes

ORIGIN	DESTINATION	Seattle CBD	201 Seattle Industrial Area	South Seatte/Boeing Field	TO West Seaffle	Capitol Hill	90 Queen Anne-Lake Union	eijoubeW 1107	89 University District/Sand Point	66 Ballard-Green Lake	D North Seattle/Northgate	11 Shoreline-Lake Forest Park	The Bothel Kirkland/Redmond	TI Northwest Bellevue/CBD	TIT Other Bellevue/Mercer Island	SeaTac 1115	Dither Soutwest King County	1117 Renton/Kent	ksadnah 1118	6 Other West King County	LIT All Other Places	Origin Shares
South Bainbridge Island	1120	4.0%	0.3%			1.4%	0.5%		1.2%	2.1%	1.2%	0.3%	0.3%	0.3%	0.7%	0.9%	0.5%	0.3%	0.3%	0.3%	2.1%	17.0%
North Bainbridge Island	1121	1.9%	0.3%	0.5%	0.5%	2.2%	1.4%	0.2%	1.6%	2.2%	0.5%		1.0%	1.4%	2.2%	2.2%		1.2%	0.5%	0.2%	1.9%	22.1%
Poulsbo	1122	0.3%							0.2%	0.3%								0.2%		0.2%	0.3%	1.6%
Kingston	1123									0.2%						0.3%		0.2%			0.2%	0.9%
Other North Kitsap County	1124	1.7%	0.2%	0.9%	0.7%	1.4%	1.0%	0.3%	1.0%	0.5%	0.3%		0.2%	0.2%	1.6%	1.7%	0.7%	0.7%	0.3%	0.3%	1.7%	15.6%
Greater Silverdale	1125	0.5%		0.2%		0.7%				0.3%	0.2%				0.3%							2.2%
North Central Kitsap County	1126		0.2%		0.2%	0.2%	0.3%						0.3%		0.5%	0.9%					0.2%	2.8%
Mason County	1127														0.3%							0.3%
South Kitsap/West Pierce Co.	1128		0.2%		0.2%																0.3%	0.7%
Port Townsend	1129			0.2%		0.3%	0.2%		0.2%	0.3%	0.2%					0.2%			0.3%			1.9%
Other Northeast Jefferson Co.	1130	0.9%		0.2%	0.2%	1.9%	1.0%	0.3%	0.7%	0.3%	0.2%		0.7%		0.3%	0.9%	0.3%	0.3%	0.9%		0.3%	9.5%
Southeast Jefferson County	1131										0.2%		0.2%	0.2%	0.3%	0.2%		0.2%	0.2%	0.2%	0.7%	2.2%
Port Angeles	1132	0.7%					0.2%	0.2%	0.2%		0.2%	0.3%	0.2%									1.9%
Sequim/Other East Clallam Co.	1133	2.2%		0.3%	1.0%	0.9%	0.9%	0.7%	0.2%	0.7%	0.9%		0.3%	0.3%	0.9%			0.9%	0.7%	0.2%	1.4%	12.5%
West Olympic Pensinsula	1134	0.3%	0.3%	0.9%		1.7%	0.3%	0.3%	0.2%	0.5%	0.2%		0.3%		0.3%	0.2%				0.7%	0.2%	6.6%
Greater Bremerton	1135	0.3%		0.2%	0.2%	0.2%										0.2%					0.2%	1.2%
South Central Kitsap County	1136					0.2%																0.2%
All Other Places	1137					0.2%															0.7%	0.9%
Destination Shares		13.0%	1.6%	3.3%	2.9%	11.2%	5.9%	2.1%	5.4%	7.6%	4.0%	0.7%	3.6%	2.4%	7.6%	7.6%	1.6%	4.0%	3.3%	2.1%	10.2%	100.0%

Figure 12-6
Seattle - Bainbridge Eastbound Sunday Survey Period Trips
All Boarding Modes

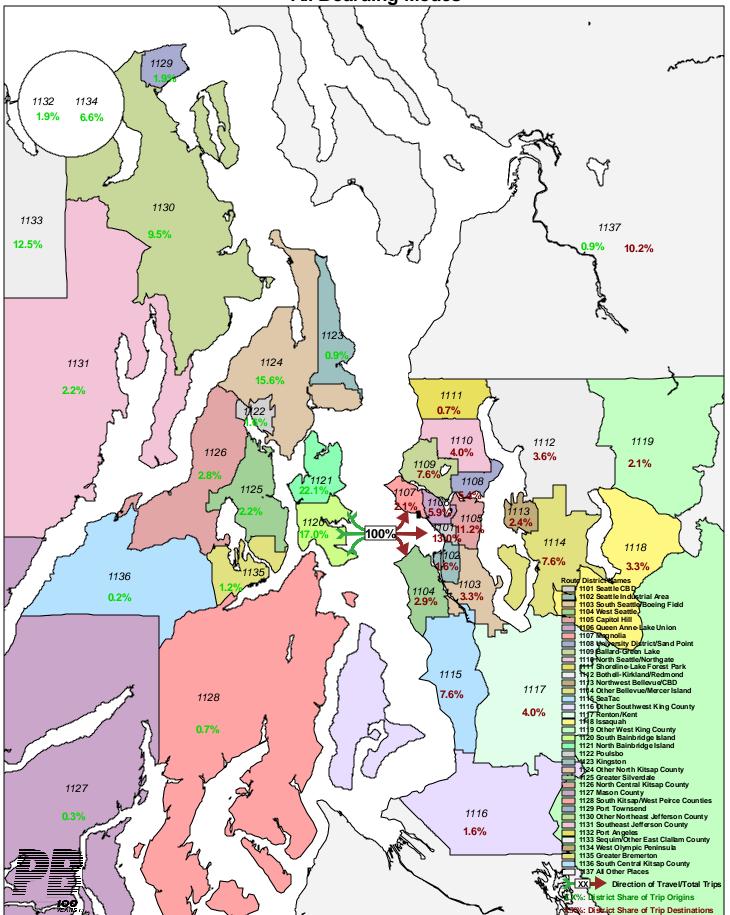


Figure 12-7
Seattle - Bainbridge Westbound Sunday Survey Period
Trip Origins & Destinations by Boarding Mode

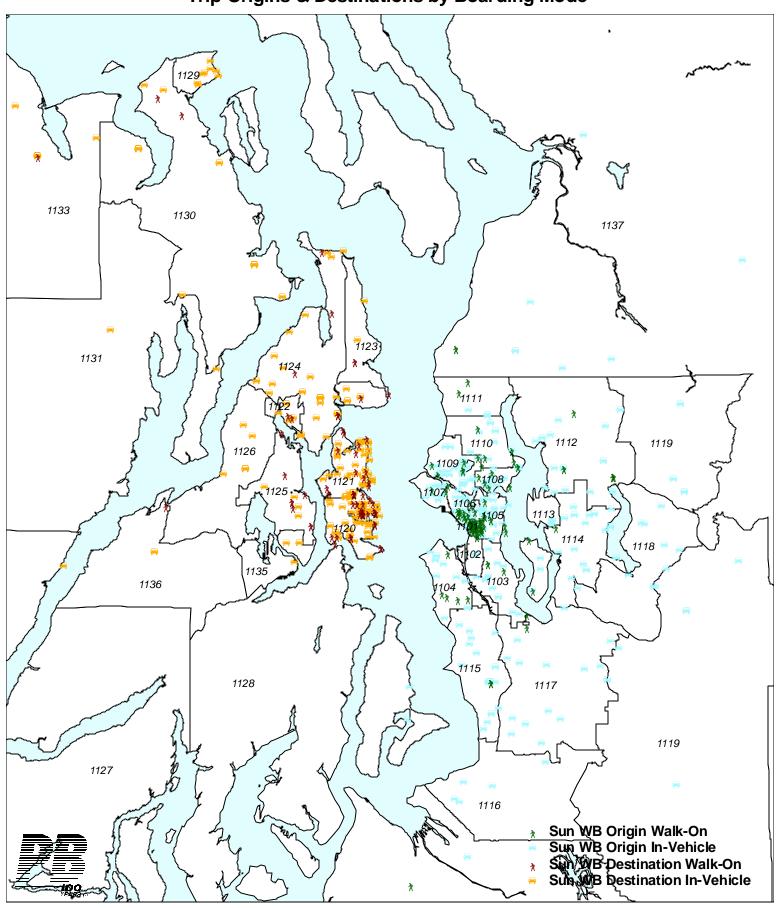


Figure 12-8
Seattle - Bainbridge Eastbound Sunday Survey Period
Trip Origins & Destinations by Boarding Mode

